



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,228	12/05/2003	David Hawley	16105-002US3 / 2002P00003	9220
32864 7590 01/25/2008 FISH & RICHARDSON, P.C. PO BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER RAMPURIA, SATISH	
			ART UNIT 2191	PAPER NUMBER
			MAIL DATE 01/25/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/729,228

Applicant(s)

HAWLEY ET AL.

Examiner

Satish S. Rampuria

Art Unit

2191

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

1. This action is in response to the amendment filed on 10/17/2007.
2. Claims amended by the Applicant: 1 and 8
3. Claims 1-14 pending.

Continued Examination Under 37 CFR 1.114

4. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/17/2007 has been entered.

Priority

5. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copies have been received on May 18, 2001 with PCT/EP01/04095 filed in April 10, 2001.

Response to Arguments

6. In response to the applicants argument/comments, the "provisional" double patenting rejection should continue to be made by the examiner in each application as long as there are conflicting claims in more than one application

unless that "provisional" double patenting rejection is the only rejection remaining in at least one of the applications. See MPEP §804. Further, the art rejection is withdrawn in view of arguments and the allowed parent application No.

10/646,428.

7. Applicant's arguments filed on 10/17/2007 with respect to claim 9 have been considered but they are not persuasive.

In the remarks, the applicant has argued that:

Claim 9, as amended, is similarly patentable over UIML because UIML does not disclose or suggest all of the limitations recited in claim 9. For example, UIML does not disclose or suggest a method that includes "customizing a workbench component that identifies constraints on the validity of the application specification document." The Examiner contended, in rejecting claim 9, that figure 1, figure 3, and related discussion of UIML disclose this aspect of claim 9. See Office Action, pages 13-14). This is not correct. Neither figure 1 nor figure 3 of UIML show a workbench component or anything resembling a workbench component, and no mention or suggestion is made in UIML of identifying constraints on the validity of the application specification document. Furthermore, amended claim 9 recites "rendering a first object and a second object on the user interface of the device using the user interface model according to one of the layout themes for the device." UIML also fails to disclose or suggest this aspect of Applicants' claim 9.

Examiner's response:

In response to Applicant's argument, UIML disclose an XML language that permits a declarative description of a user interface in a highly device-independent manner. An objective of UIML is to permit a UIML document to be mapped to any type of user interface, from graphical to speech (see Abstract). FIG. 1 of UIML shows customizing data for multiple devices by receiving a document having a statement with an indication to render first and second objects and interpreting the statement to identify a presentation pattern for the assembly from predefined first and second presentation patterns according to the type of the device, i.e., customized. Therefore, FIG. 1 of UIML

clearly shows customized deployment of UIML which is done on different types of devices and in multiple types of languages.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claim 8 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 8 recite one computer-readable storage medium, the term as described in the published specification [0112-0113] that "computer-readable medium" as to include carrier and signal. Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism per se, and as such are nonstatutory natural phenomena. O'Reilly v. Morse, 56 U.S. (15 How.) 62, 112-14 (1853). Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in § 101.

Double Patenting

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where

the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 2, 3 and 6-8 provisionally rejected on the ground of nonstatutory

obviousness-type double patenting as being unpatentable over claim 1, 2, 4, 5, 6,

and 7 of copending Application No. 10/646,428 (hereinafter '428). Although the

conflicting claims are not identical, they are not patentably distinct from each other

because of the following observation.

<i>Instant Claim</i>	<i>'428 Claim</i>
1. A method for rendering an assembly of a first object and a second object on a user-interface of a device, the device being either of a first type or of a second type, the first and second objects presenting data of an application, the method comprising the following steps:	1. A method for rendering an assembly of a first object and a second object on a user-interface of a device, the device being either of a first type or of a second type, the first and second objects presenting data of an application, the method comprising: providing an

<p>receiving an application specification document by the device, the application specification document having a statement with an indication to render the first and second objects in the assembly; interpreting the statement of the application specification document to identify a presentation pattern for the assembly from predefined first and second presentation patterns according to the type of the device; and rendering the assembly of the first and second objects on the user-interface according to the presentation pattern identified in the interpreting step.</p>	<p>interpreter specific for an application specification language used to write the application; storing the interpreter in the device; receiving an application specification document by the device, the application specification document having a statement with an indication to render the first and second objects in the assembly; interpreting the statement of the application specification document using the interpreter to identify a presentation pattern for the assembly from predefined first and second presentation patterns according to the type of the device; and rendering the assembly of the first and second objects on the user-interface according to the presentation pattern identified during the interpreting of the statement.</p>
<p>2. The method of claim 1, prior to the receiving step, further comprising:</p>	<p>2. The method of claim 1, further comprising: simulating the rendering of the</p>

specifying the application in the application specification document by a workbench in a development computer; and simulating the rendering step by a pre-viewer component of the workbench.	assembly by a pre-viewer component of a workbench used in a development computer.
3. The method of claim 1, wherein in the rendering step, the first object and the second objects are rendered according to the presentation pattern and to a predefined hierarchy pattern.	4. The method of claim 1, wherein in the rendering step, the first object and the second objects are rendered according to the presentation pattern and to a predefined hierarchy pattern.
6. The method of claim 1, wherein the presentation pattern is as a display pattern, wherein the objects are rendered to the user-interface being a screen, and wherein the presentation pattern is identified according to the size (X) of the screen.	5. The method of claim 1, wherein the presentation pattern is as a display pattern, wherein the objects are rendered to the user-interface being a screen, and wherein the presentation pattern is identified according to the size of the screen.
7. The method of claim 1, wherein in the rendering step, the presentation pattern is an audio pattern.	6. The method of claim 1, wherein in the rendering step, the presentation pattern is an audio pattern.
8. A computer-program product to visually	8. A computer-program product to visually

render a first object and a second object in an assembly on screen of a computing device, the objects presenting data of an application on a computer that is at least temporarily coupled to the computing device, the device being either of a first type or of a second type, the computer-program product having instructions that cause a processor of a computing device to perform the following steps: receiving an application specification document from the computer, the application specification document having a statement with an indication to render the first and second objects in the assembly; interpreting the statement of the application specification document to identify a visual presentation pattern for the assembly from predefined first and second visual presentation patterns according to the type of the device; and rendering the assembly of the

render a first object and a second object in an assembly on screen of a computing device, the objects presenting data of an application on a computer that is at least temporarily coupled to the computing device, the device being either of a first type or of a second type, the computer-program product having instructions that cause a processor of a computing device to: provide an interpreter specific for an application specification language used to write the application; store the interpreter in the computing device; receive an application specification document from the computer, the application specification document having a statement with an indication to render the first and second objects in the assembly; interpret the statement of the application specification document using the interpreter to identify a visual presentation pattern for the

first and second objects on the screen according to the visual presentation pattern identified in the interpreting step.	assembly from predefined first and second visual presentation patterns according to the type of the device; and render the assembly of the first and second objects on the screen according to the visual presentation pattern identified in the interpreting step.
--	---

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 9-14 are rejected under 35 U.S.C. 102(b) as being anticipated by the published document "UIML: An XML Language for Building Device-Independent User Interfaces" by Marc Abrams and Contanrinos Phanouriou (hereinafter, UIML) in December 1999.

Per claim 9:

UIML discloses:

defining a user-interface model (page 4, section UIML-Main Elements "...user interface...set of interface parts comprising the interface...");

defining an application specification document by a meta-language (page 5, section UIML as a meta-language "...UIML can be viewed as a meta- or extensible language...");

customizing a workbench component that identifies constraints on the validity of the application specification document (See Figure 1 and 3 and related discussion);

defining layout themes for the computing device (page 5, section UIML-Main Elements "...specifies presentation style that is device-specific...");

realizing the user-interface model in an interpreter component (page 4, section UIML-Main Elements "...user interface...set of interface parts comprising the interface...");
and

realizing the layout-themes in the interpreter component (page 5, section UIML-Main Elements "...a style element, which specifies presentation style that is device-specific for each class of interface parts...")

rendering a first object and a second object on the user interface of the device using the user interface model according to one of the layout themes for the device after receiving, at the device (page 3, section Deploying UIML "...Java interpretive render permits the entire UIML interface to appear as a Java bean...end-user devices..." Also, see Figure 3), the application specification document, wherein the application specification document includes a statement with an indication to render the first and second objects in the assembly (page 3, section Deploying UIML "...UIML

document...compiled to a target platform's language...is mandatory for devices...cellular..." and page 5 section UIML as a meta-language "...UIML document...specifies a mapping of those names to a vocabulary specific to a particular target platform..." Also, see Figure 3).

Per claim 10:

The rejection of claim 9 is incorporated and further, UIML discloses: determining the types of tiles and the functionality of tiles (page 4, section UIML-Main Elements "...user interface widgets in the platform to which the user interface will be mapped"), the tiles being elements of the user-interface model (page 5, section UIML-Main Elements "...style elements...mapping of interface parts to a vocabulary of names of user interface widgets in the platform to which the user interface will be mapped"); determining relationships between the tiles in an assembly; and determining a navigation state and the required user operations on the navigation state (page 5, section UIML-Main Elements "UIML includes a peers element, which specifies what widgets in the target platform and what methods or functions in scripts, programs, or objects in the application logic are associated with the user interface").

Per claim 11:

The rejection of claim 10 is incorporated and further, UIML discloses: defining specifications to the types of tiles (page 11, Figure 3 and related discussion, ...dynamic interface generate on-the-fly); defining attributes to express properties of the

tiles; and defining attributes in the navigation state UIML uses three levels of names for interface parts and events. (page 6, section UIML as a meta-language "second name is in the style element and maps the mnemonic to an abstract widget name (e.g., MenuItem)... mapping from one abstract set of names (e.g., "BigWindow") to multiple platforms (e.g., MFC or Java Swing) without modifying the rest of the interface description...").

Per claim 12:

The rejection of claim 11 is incorporated and further, UIML discloses: defining a representation on the output media of device for each element of the user-interface model (page 5, section UIML-Main Elements "...UIML... includes a style element, which specifies presentation style that is device-specific..."); and defining the user-interface model for each operation of the user-interface model (page 5, section UIML-Main Elements "...style elements...mapping of interface parts to a vocabulary of names of user interface widgets in the platform to which the user interface will be mapped").

Per claim 13:

The rejection of claim 12 is incorporated and further, UIML discloses: creating models to specify the tiles and the assembly; implementing constructors to create user-interface instances from the application specification document (page 3, section Deploying UIML "...UIML document...compiled to a target platform's

language...is mandatory for devices...cellular..."); and implementing the user-interface instances from the models in a computer programming language (page 5 section UIML as a meta-language "...UIML document...specifies a mapping of those names to a vocabulary specific to a particular target platform..." Also, see Figure 3).

Per claim 14:

The rejection of claim 13 is incorporated and further, UIML discloses: implementing each layout-theme as a layout handler (page 7, section UIML Architecture "style element defines the values of various properties associated with interface parts"); and obtaining a selection of the layout-theme by a developer and forwarding the selection to the interpreter component (page 7, section UIML Architecture "The structure element enumerates a set of interface parts and their organization for various platforms and devices... customization for different user groups... behavior element enumerates a set of rules that describe how the user interface should react on different stimulus (i.e., from user, device, or the application logic)").

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Satish S. Rampuria** whose telephone number is **(571) 272-3732**. The examiner can normally be reached on **8:30 am to 5:00 pm** Monday to

Application/Control Number:
10/729,228
Art Unit: 2191

Page 14

Friday except every other Friday and federal holidays. Any inquiry of a general nature or relating to the status of this application should be directed to the **TC 2100 Group receptionist: 571-272-2100**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Wei Y. Zhen** can be reached on **(571) 272-3708**. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Satish S. Rampuria
Patent Examiner/Software Engineer
Art Unit 2191

MARY STEELMAN
PRIMARY EXAMINER
